

PATENT LAW

- 1) patents serve to protect the result of inventive work,
- 2) thereby acting as an incentive to invest in R&D.
- 3) R&D underpins the economy of most developed nations.
- 4) Because the information contained in a patent is published by the Patent Office the patent system serves to disseminate new information about research projects and new innovation - thereby giving ideas to those also working in the area.
- 5) There are many tens of millions of patents world-wide. They are often the only place information can be fully obtained about an invention (c.f. the America's Cup hull and Enigma encoder). The information contained in the patent is often unique.
- 6) over 90% of these patents are no longer in force, so the patent reference system is a good way of finding out what has gone before and assessing the value of continuing with a proposed research project.
- 7) Provides information about what competitors are doing.

Patents

A UK national can obtain a patent via one of three routes:

- 1) a European Patent, via an application to the European Patent Office (EPO). This will be valid in as many EPC member states as the applicant designates.
- 2) a UK Patent, via an application to the UK Patent Office. This is only enforceable within the territory of the UK. In this handout the UK Intellectual Property Office (UK-IPO) is referred to as the Patent Office throughout.
- 3) a PCT (patent co-operation treaty) patent provided through WIPO which allows filing in multiple jurisdictions through a single application.

The UK Patent System

Based, since 1977, on the EPC - UK courts influenced, but not bound, by decisions of the EPO.

The Patents Act 1977 (as amended)

Who can apply for a patent?

Section 7(1) "Any person may make an application for a patent..."

7(2) "A patent for an invention may be granted -

a) primarily to the inventor or joint inventors

7(3) "In this Act 'inventor' means the actual devisor of the invention

Section 7(2)(b) states that where the invention is made by an employee in the course of his employment then the employer is regarded as being entitled to the patent. It is possible in certain circumstances for the employee to obtain some compensation for this effort in producing the new invention under section 40.

A The Application Procedure

(UK nationals must file any patent application in the UK first)

The UK operates a “first to file” system. The inventor who files his patent first is regarded as taking priority over any other person who later seeks to obtain a patent for an identical invention. Most countries around the world operate on a first to file basis.

Priority Date = the date at which an invention is first made known to a Patent Office

Application Date = the date on which the patent application is filed at a Patent Office

Usually the priority and application dates will be the same, but where an application is filed at a foreign Patent Office the system of reciprocal rights set up under the Paris Convention means that the applicant can if s/he wishes to apply for a patent in other countries as long as the application is made within twelve months of the original filing

Asahi Kasei Kogyo's Application [1991] RPC 485 (H.L.)

Example

January 1994 Prof. X. files a patent application at the UK Patent Office

September 1995 Dr. Y. files a patent application for an identical invention at the German Patent Office

October 1994 Prof. X. files a patent application at the German Patent Office for the same invention as per his January filing

The act of filing at the UK Patent Office in January gives Prof. X. priority in respect of his German patent application over Dr Y.

Dr Y's invention will be regarded as having been anticipated by Prof. X's invention as described in the January 1994 patent application and Dr Y's application will fail for lack of novelty.

Prof. X's application, filed in the UK in January, will give him priority over any other person attempting to file for the same invention, and he can file other patent applications for the same invention, as long as they are within twelve months of the first filing. His first filing will not be regarded as having “anticipated” these future filings.

The application takes the form of a patent specification which is submitted to the Patent Office with the relevant fees. The specification is examined to ensure that it complies with all the requirements. It can take between 1-5 years for a grant to take place.

Section 14(3) —The Specification

The most important part of a patent is the specification. This is the document within which the applicant:

- 1) provides biographical information about the inventor
- 2) describes the invention he is claiming, including a description of the prior art from which the invention has been developed and
- 3) presents the claims - these set out the scope of the protection he is seeking

The Description

This must be in writing, but can be supplemented by drawings or photographs. The purpose of this is to inform any person reading it:

- 1) of the gap in knowledge which the claimed for invention fills;
- 2) how the invention was created (the working)
- 3) (most important) it must give sufficient information to enable any person skilled in the relevant art to reproduce the invention exactly simply by following the steps outlined in the description (enablement)

Section 14(5) —The Claims

“The claim or claims shall-

- a) define the matter for which the applicant seeks protection;
- b) be clear and concise
- c) be supported by the description; and
- d) relate to one invention or to a group of inventions which are so linked as to form a single inventive concept.”

The applicant must ensure that (s)he is:

- a) claiming a single invention;
- b) claiming something which is novel and which involves an inventive step;
- c) is not claiming material which is not part of the invention.

In order to ensure that the claims are precise most patent applicants employ a patent agent to draft the specification for him. The art of good patent drafting is to draft the claims as broadly as possible to include all possible variants on the invention, but not to draft it so broadly that it can be read as encompassing more than one invention.

for an example of excellent patent draftsmanship see *Hickman v Andrews* [1983] RPC 147

The construction or reading of the claims will always be at the centre of any infringement or opposition action

In most patent actions the claimant claims infringement and the defendant counterclaims by alleging invalidity of grant.

There are no set rules on how to construct a patent claim. The courts tend to steer a path between a literal construction of the wording used, what did the applicant actually claim, and a purposive construction, what did the applicant mean to claim?

**Catnic Components Ltd v Hill & Smith* [1982] RPC 183

B) Search and Examination — Patent Act Rules 1977

Once the application has been submitted the Patent Office (PO) will examine it as to novelty and inventiveness.

There are three steps to the granting process

- 1) The PO will run a search to see if a patent over the same material has been filed anywhere else. It will also make a search of existing technical literature
- 2) The application will be published (usually within 18 months of filing). This gives public access to the information. Opponents to the patent may challenge.
- 3) In light of both the official search and responses from the public the applicant is offered the opportunity to amend the claims.

If there is any disagreement between the applicant and the examiner then the issue will be heard before a senior examiner if it is a UK application or before the full Examining Division if the application is before the EPO

A patent grant is effective from the date of official publication. Any opponents to the patent grant have nine months from grant within which to register an opposition.

C) Validity

Patentable subject matter

Section 1(1) Patents Act 1977

“A patent may be granted only for an invention in respect of which the following conditions are satisfied, that is to say

- a) the invention is new;
- b) it involves an inventive step;
- c) it is capable of industrial application;

d) the grant of a patent for it is not excluded by subsection (2) and (3) below”

Subsection 2 excludes patents for those things which are not deemed to be inventions.

Subsection 3 concerns those inventions which are not regarded as being patentable on the grounds of public policy.

Section 1(2) Patents Act (Article 52 EPC):

“...the following are not inventions for the purposes of the Act...

- a) a discovery, scientific theory or mathematical model;**
- b) a literary, dramatic, musical or artistic work or any other aesthetic creation whatsoever;**
- c) a scheme, rule or method for performing a mental act, playing a game or doing business, or a program for a computer;**
- d) the presentation of information;**

Non Patentable Inventions

These exceptions are given a very restrictive application.

Granting Criteria

a) Novelty

Patents are not granted over inventions which are already known—no one can claim rights over knowledge that is already available

Section 2

“1) An invention shall be taken to be new if it does not form part of the state of the art.

2) The state of the art in the case of an invention shall be taken to comprise any matter...which has at any time before the priority date of that invention been made available to the public (whether in the UK or elsewhere by written or oral description...”

**Van der Lely v Bamford* [1963] RPC 61, HL

**Synthon BV v Smithkline Beecham plc* [2005] UKHL 59

This is a question of fact.

State of the art

Anything which has been disclosed to the public in such a way that it clearly and unambiguously describes the invention so as to “enable” the person reading it to be aware (but not necessarily understand) the new technical effect contained within the invention.

Extent of disclosure required.

Need to be able to show that the information was

- a) potentially available and
- b) directly accessible

**Windsurfer International v Tabur Marine* [1985] RPC 59

The information in 1958 was potentially available, the windsurfer could be seen on the lake and was directly accessible, anyone could have access to the lakeside.

As long as it is possible for a member of the public to see the documentation containing the invention or if it is possible to inspect the invention then regardless of whether anybody actually has this will be regarded as disclosure.

Theoretically a disclosure to a single person would be sufficient to break novelty, but the courts have recently shown that this would be unduly restrictive and disclosure to a few scientists would not break novelty

It is not permitted to combined pieces of previously published documentation (mosaicing) to show that the various component parts of the invention were known albeit not in that combined form. If all the documents are, however, meant to be read together then they will be regarded as disclosing the invention. (contrast this with mosaicing in relation to inventive step).

A combining of previously known material might be novel, although it might not be sufficiently inventive.

New Use of an Old Thing

It is possible to obtain a patent for a previously unknown use of a known thing, subject to the new use complying with the inventive step requirement.

**Hickman v Andrews* [1983] RPC 144

Inventive Step/Obviousness

Section 3

“An invention shall be taken to involve an inventive step if it is not obvious to a person skilled in the art...”

Notional person skilled in the art:

- is capable of making routine developments
- but lacks imagination and ingenuity

Four Stage Test: Oliver L.J. in **Windsurfer* (above)

- 1) the court must identify the inventive concept embodied in the invention;
- 2) it must place itself in the shoes of a normally skilled but unimaginative worker in that area with all the accompanying knowledge at the date the invention was created;
- 3) what are the differences between the common knowledge and the invention;
- 4) do these differences constitute steps which are or would have been obvious to the skilled but unimaginative worker?

Is it Obvious to Try?

Haberman v Jackel International [1999] FSR 683 is an “invention” patentable even where it has been “under the noses” of others working in the industry?

Pfizer Ltds Patent [2001] FSR 201 “If a genius in a field missed a particular development over a piece of prior art, it could have been because he missed the obvious (as clever people sometimes did) or because it was inventive....Similarly, evidence from an uninspiring worker in the field that he did think of a particular development did not prove obviousness; he might just have had a rare moment of perceptiveness.” Laddie at para 63

Mosaicing

Unlike for novelty, mosaicing is permitted in assessing what information would the notional skilled person have had available to him. Would he have read this journal and on the basis of this information would it have been obvious to him to take the concepts contained in both and combine them?

If, however, it would take a feat of imagination to combine the concepts or to look outside the usual journals then the combining of the information may not be obvious.

Increasing problems with advances in technology and computer based searches of all relevant information.

The advance forward can be very small, simple inventions are often the most important.

The assessment of inventiveness should not be left to the inventor as what might be a stroke of pure genius might be obvious to others and equally what might be simple to him might be a surprising use of that material

Industrial Application

Section 4 (Article 52(4))

“1) subject to subsection (2) below, an invention shall be taken to be capable of industrial application if it can be made or used in any kind of industry, including agriculture.

2) An invention of a method of treatment of the human or animal body by surgery or therapy or of diagnosis practised on the human or animal body shall not be taken to be capable of industrial application.

INFRINGEMENT

The value of a patent lies in being able to stop others from using the invention without consent. The value of the monopoly lies in being able to bring an infringement action. Such an action will only succeed if the patentee can show that the alleged infringing act falls within the scope of the claims as properly construed. This means that the key to any patent infringement act is the interpretation of the claims.

Where a patent is for a process the right extends to any product made using that process - this raises anomalies such as a patent for a process of breeding plants or animals being held to cover a variety produced using that process. Many patent infringement actions are countered by allegations of invalidity.

Section 69(1) & (2)(a)

No infringement action can be brought until a patent has been granted. The patentee can then sue for all infringing acts which occurred between publication of the application and the grant on the patent.

Section 60 Does the act fall within the scope of the monopoly claimed? Rarely difficult to prove, however, the section has a second limb which does cause problems: defining an infringing activity where the act involves something similar but not identical to the invention described in the patent.

Infringement = to make, use, dispose of, import, offer for use, dispose of

It is not an infringing act to repair the patented product *United Wire v Screen Repair Services* [2000] FSR 204, CA, (upheld by the HL) genuine repairs to a patented product does not infringe the patent because the repair does not amount to an infringing act.

Infringement is assessed by reference to what the claims actually say. Some commentators argue that the construction here is analogous to interpretation in contract law.

Construction of the Claims

Article 69 of the EPC states:

“(1) The extent of protection conferred by a European patent or a European patent application shall be determined by the terms of the claims. Nevertheless, the description and drawings shall be used to interpret the claims.”

Literal construction = give the words used in the claims their literal meaning. The court looks for the plain meaning of the claims. If the infringing act falls outside the wording used in the claims then the act is not regarded as being an infringement.

Pith & Marrow construction = slightly wider construction than for literal construction. But it still relies on the exact wording used

**Catnic Components Ltd v Hill & Smith Ltd [1982] RPC 183*

construction of a box lintel.

Argument centred on the whether the word “vertical” meant exactly vertical or substantially vertical.

Court of Appeal - no literal infringement

House of Lords - purposive construction - the defendant’s lintel infringed the claimant’s lintel

Lord Diplock:

“A patent should be given a purposive construction rather than a purely literal one derived from applying to it a kind of meticulous verbal analysis in which lawyers are too often tempted by their training to indulge...The question in each case is whether persons with practical knowledge and experience of the kind of work in which the invention was intended to be used, would understand that strict compliance with a particular...word....was intended by the patentee...”

Claims are now construed on the basis of what is stated, only if 1) the claims are ambiguous through no fault of the patentee or 2) the extent of invention so groundbreaking that no-one could foresee the extent of protection due to the patent holder at the time the specification was drafted will the Protocol Questions be applied.

Icon Health & Fitness Ltd v Precise Exercise Equipment (2001) ChD. Laddie, a patent for an abdominal exerciser with arm rests not infringed by an exerciser with no arm rests. “It was clear what this invention was intended to cover.”

The question is whether, given the process of negotiation prior to a patent being granted and the use of a patent agent, it is appropriate to use a purposive, as opposed to a literal, approach in interpreting a patent.

Dyson Appliances Ltd v Hoover Ltd [2001] RPC 473

Defences

Section 60(5)

A number of defences exist in respect of using a patented invention - but as with the exceptions to patentable subject matter these are given a restrictive application.

i) Private use

ii) Experimental use or the Research Exemption. This is an increasingly difficult defence to rely on as the use must be purely experimental, often defined as the right to find out what the patented invention does, and it must non-commercial. This often turns on the intention lying behind the use - if there is a commercial intent then the defence will not stand. See Cornish *Experimental Use of Patented Inventions in European Community States* (1998) 29 IIC 735; van der Merwe *Experimental Use and Submission of Data for Regulatory Approval* (2000) 4 IIC 380.

iii) Use in the preparation of medicines

iv) Farmers' Privilege - the Patent Regulations 2000 introduces a right for farmers to reproduce certain types of patented biological material. This privilege extends to a limited group of crops and can be exercised is subject to a lower royalty payment. Whilst the practice was introduced in the plant variety rights system, it has been extended to cover the right of a farmer to reproduce patented livestock.

Compulsory Licensing

National patent offices (but not the EPO) may grant a compulsory licence to a third party where it is deemed to be in the public interest to do so (section 48 UK Patent Act 1977).

Most patent offices operate on a basis of good faith, which is that they should give effect to the reasonable expectations of the patentee. This means that it is unlikely that they will grant a compulsory licence where the patentee has already refused to do so. In the UK no compulsory licence has been granted under the 1977 Act. A reason why it will become increasingly unlikely that compulsory licences will be granted is because the US does not have a system of compulsory licensing within its patent system and it holds that Article 31 should only be used in extreme situations.

Crown Use

Sections 55 to 58 of the Patents Act 1977 permits a Government Department to obtain a compulsory licence to use patented material. The use is subject to some compensation being paid to the patentee. The right specifically relates to defence, production of drugs and the production or use of atomic energy. At present Crown Use rarely occurs but it is likely to play an increasing role in respect of making patented drugs available at appropriate prices to the healthcare sector. The issue here is whether this would be permitted under TRIPs.

Exhaustion of Rights

Once a patented product is placed into the market with the consent of the patent owner then the patent owner cannot control what happens to goods thereafter in terms of controlling the sale of that specific item - he can, however, prevent the reproduction of the item and the sale of that reproduction.